

CREATING SHARED VALUE

Impacts of Nestlé's Moga Factory on Surrounding Area Executive Summary, 2012



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No company works in a vacuum.

Invariably, an interdependent relationship

develops with the community from where

it operates. Nestlé's mission, outlined by

its founder Henri Nestlé more than 150

years ago, is to "positively influence the

social environment" in which the

company operates as "a responsible

corporate citizen, with regard for those

environmental standards and societal

aspirations which enhance quality of life".

More than 150 years later, this mission

statement is as valid as first stipulated in

1857. This suggests that the importance

of social development is deeply ingrained

in the company's genes. Motivated

to increase profitability, enhance

international reputation, forge strong

relations with its business partners,

become an attractive employer and draw

the best talents, secure customer

satisfaction and loyalty, open up new

business opportunities and larger market

shares and continuously attempt to

improve the social and the economic

environment it operates in, Nestlé has

continuously fine tuned its corporate

practices to support these goals over time

and space. It has consistently strived to

strengthen long-term partnerships with

its suppliers, shareholders, employees,

customers, surrounding communities and

governments to whom it has paid more

and more taxes.

The present Executive Summary is the

result of a study carried out by the Third

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World Centre for Water Management, Mexico, on the impacts Nestlé's factory in Moga, Punjab, India, has had on the social and economic development of the people in the region over the past 50 years. The main objective is to learn to what extent Nestlé has contributed to fulfilling the societal aspirations and expectations of the people around its factory in terms of poverty alleviation, general improvements in the community's standards of living and environmental conservation. To the best of our knowledge, this is the first ever comprehensive and in-depth study on the impacts of a private sector factory on and around the area where it is located that has been carried out anywhere in the world.

The findings indicate that Nestlé has very successfully established long-term symbiotic relations with its primary stakeholders in Moga (namely direct employees, suppliers, communities, and customers). Over the years, it has also continued to build tangible and intangible infrastructure (physical, educational, labour, social, and environment-related) it needs to transform the existing conditions to its advantage as well as those who live in and around the area. It has done so by matching corporate objectives to local opportunities, endowments and needs, which has also resulted in positive spillovers and externalities benefiting local consumers, producers and the community at large.

In Moga, the company has created both direct and indirect employment, attracted capital (physical, investment and human) to the area, and improved the quality of life of a few hundred thousand families. In the process, it has created substantial wealth for its shareholders. In order to ensure a long-lasting and sustainable growth, Nestlé has established, fostered and furthered mutually reinforcing beneficial synergies with its suppliers, employees and the communities they belong to. As a socially responsible, responsive and engaged company, it has gone out of its way to support the community. This has secured the human, physical, social, technological and political capital it has needed for operating and growing as a

profitable enterprise. All these have reinforced Nestlé's market share, reputation and credibility not only in the region and in the country but also around the world. They have further accelerated its turnover and profits which have pleased its shareholders.

While the term 'corporate social responsibility' is now in the lexicon of nearly all important multinational corporations and numerous academics, neither the concept nor the philosophy behind it were in vogue when the Moga factory was first established in 1961. This is not surprising since knowledge mindsets, business, and societal perceptions and expectations were very different half-century ago compared to

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what they are at present. What is impressive, however, is that even though the concept of 'creating shared value' (CSV) did not exist five decades ago, the general philosophy behind it was implicitly, and even somewhat explicitly, evident in Nestlé's actions when it decided to build a factory in Punjab. In retrospect, by reviewing and assessing the approaches Nestlé took and has taken at Moga, one can only marvel at the activities that Nestlé has implemented. These categorically show that the unknown and unsung initial planners, even though they did not articulate the thinking behind corporate social responsibility or creating shared value clearly, they fully understood the logic

behind such a philosophy. They were convinced that the success or failure of the Moga factory is intertwined with improving the lifestyles of its milk suppliers. If their standards of living could be improved, the success of the factory would be assured and vice versa.

A very important factor has also been the interest of the company in developing long-term relational interactions and not only transactional ones with its suppliers, which has been a fundamental instrument to build trust and loyalty with its suppliers and the society they are conjoined with. In fact, and since its inception in the early sixties, the community and the various levels of government have consistently regarded the Moga factory as a positive

'agent of change', acknowledging the advantageous externalities, beneficial spillovers and favourable multiplier effects it has brought about and that have directly and indirectly resulted in the overall improvement of the population's living standards and also quality of life.

Moga has undergone changes well beyond the significant improvements in the community's standard of living, social and educational conditions and infrastructural developments. Earlier assured income receipts, steadily improving socio-economic conditions and loyalty stood at the core of the suppliers' decision to work continuously with Nestlé. Now, however, our findings indicate this situation is changing as local

competition for the procurement of milk and other associated raw materials intensifies. The farmers are becoming increasingly aware of the high demand for their products from other sources which did not exist before. This poses Nestlé with both a challenge and an opportunity to reassess its business model, respond to present needs and meet future challenges. Undoubtedly, this could also be an occasion for the company to become, once again, a pioneer in social and corporate responsibility under an ever evolving and challenging panorama where change stands as the only assured constant. An overall view of what has been the interplay of factors affecting Moga's development since Nestlé

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established its factory in the area is shown in Table 11.

The report's general findings can be summarized as follows:

Over the years, and since Nestlé opened its Moga factory, the direct and indirect employment it has generated for the region has been substantial. The company has been a stable source of prosperity and well-being. Steady income receipts and community support have widely and positively impacted the district of Moga and its inhabitants.

At present, the Moga factory provides employment directly to 2,400 persons. In addition, we estimate that it is providing employment for 86,371 persons directly

through its 147 main suppliers only on Nestlé-related economic activities. These direct suppliers again depend on indirect suppliers who further generate additional employment so that direct suppliers can carry out Nestlé's work. We did NOT estimate these secondary employment opportunities, but they are likely to be substantial, probably of the order of 45% to 65% of the number of employments generated by the direct suppliers.

Nestlé has become a key player in seizing agricultural potential and integrating it to household, micro and macro economic and agricultural trade issues that play intertwined roles for poverty alleviation, provision of improved food and nutrition, community-building and in bringing about

individual, family and community employment-related benefits. Importantly, the positive spillovers the company has triggered have directly and indirectly led the local individuals and ancillary firms to 'climb the quality ladder' steadily.

Regarding milk, local producers and consumers have reaped quality gains from providing raw materials and services to Nestlé, which as a customer has imposed higher product quality standards than those locally followed, since its very beginning. What is more, it has actively and consistently provided support on how to meet, maintain and improve those higher standards. These quality upgrades have been used as benchmarks and

common denominators for other dairy stakeholders, setting a precedent and easily recognizable quality-price comparison and reference point for consumers and competitors for the region.

The relationships, factory employees, agents, dairy producers and workers of the ancillary companies have established with Nestlé have given them brand-associated social prestige and trustworthiness. This reputational capital has been built from the interplay of organizational, economic, physical, human and technological resources Nestlé invests in and requires from the people it collaborates with. The resulting reliability, and attributed quality by proxy

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seems to have been particularly true for the ever-expanding array of service industries that have sprung up around the company's activities and production lines. Numerous ancillary enterprises have developed a symbiotic relationship with Nestlé, tying most of their successes and business expansion plans to that of its business partner. Working and collaborating with the company has also had an aspirational impact in the community. All these are analyzed in detail in the report.

It is noteworthy that a leading politician we interviewed opined that the cleanliness and the hygienic conditions of the Moga factory and also at Paras (a main Nestlé supplier) are significantly better

than the local public hospitals! The team visited one hospital to interview a doctor.

There is absolutely no question that the cleanliness of both Moga and Paras factories are significantly better than the hospital we visited. Thus, Nestlé has created new, much higher, standards for cleanliness and hygienic conditions in Moga, and has conclusively shown that there is no reason as to why such standards cannot be maintained and continually improved in such settings.

Driven by the need to increase quantity and quality of milk, and motivated by greater social objectives, Nestlé and the farmers supplying to it have established a 'community of interest's' in which the company encourages, supports and

facilitates those factors necessary for its operation. Nestlé's Agricultural Extension Services have been a defining factor in securing adequate and regular inputs and raw material. These services operate as a continuous and expanding network of free, relevant and cutting-edge veterinary, animal husbandry, dairying and agricultural advice, technical assistance, education and capacity building sessions. Using local knowledge and partnering with local institutions and universities, Nestlé has fostered and disseminated innovations, and has encouraged their applications. The number of areas where it has promoted innovations has steadily increased with the expansion of the range of goods it produces in the Moga factory.

Surging production has brought about a similar increase in employment as supply networks and market value chains for raw and processing materials widen, and the opportunities for ancillary companies grow steadily. More importantly, the supply of higher quality raw materials and expanding availability of good quality manufactured products has improved nutritional and hygienic awareness amongst local consumers and suppliers as they have started to differentiate foodstuffs for consumption in their own households and sales to their customers. Indirectly, Nestlé has also encouraged the expansion of agro-business activities, investments in better farming and animal husbandry inputs (feed, vaccinations and

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medicines) as well as in other productive activities like construction of bio-gas plants, improved availability of clean drinking water for students and good sanitation and hygienic practices. Hoteliers, builders and various other craftsman and entrepreneurs have now settled in Moga to seize the business opportunities that have followed with the successful and continuous development of the region.

Albeit farmers' trust in and loyalty to Nestlé, intensified local competition has led them to be increasingly aware of the high demand for their products, especially milk. The increase in competition has given farmers the opportunity to seek higher prices. The extension services

Nestlé has delivered for free since the factory was first established are still deemed advantageous, but they are increasingly being taken for granted by the new generation of farmers. Such services increasingly and noticeably do not appear to tilt the balance in Nestlé's favour vis-à-vis the price of milk. For the new generation of milk producers, profitability is being increasingly measured by only one item, the price of milk.

In families where milk receipts cover basic household expenses and other farming-related costs (such as electricity), farmers would like to obtain higher and more competitive prices for the supplied milk and incur lower input costs, especially those related to animal feed. Unlike

younger farmers, who do not seem to factor in technical assistance when making supply decisions, elder farmers proudly point to the 50-year very positive business experience they share with Nestlé and seem to have more deeply internalized the transactional and relational benefits this relationship has delivered. This group has favoured supplies to Nestlé due to: steady and timely payments and the convenience in which they are made; accurate, strict, fair and transparent quality assurance controls and measurements; supporting services and training; the trustworthiness and responsiveness of accountability mechanisms; corporate reliability and reputation; and expectations of positive

technological, managerial, technical and skill spillovers. Nevertheless, and similar to younger generations, older farmers are becoming more and more open to work with other buyers if they are offered more competitive rates.

Farmers fully appreciate the periodical and the continuous training and capacity building as fundamental in their dealings with the company. This is because the transferable and practice-based skills they have acquired allow them to perform different tasks as they acquire and put those capacities into use. New and enhanced agricultural, veterinarian, managerial and trade-related knowledge has gone well beyond closing farmers' skill gaps, changing attitudes to milk

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trading and engaging women in dairying activities, all of which have positively impacted the supply of raw materials Nestlé needs to operate. With a deeper and larger pool of skills and knowledge at their disposal, farmers have enlarged their occupational flexibility and mobility, intensifying their engagement in other economic activities that are not necessarily tied to agriculture.

Participation in remunerated activities is particularly relevant for women. As their role in dairying activities has become increasingly recognized, so has their direct and indirect involvement in the industry. More than 51,000 women have received training under the Village Women Dairy Development Programme to

improve milk quality, hygiene and yields.

Some community members have even reshaped gender expectations by taking on professional roles in male-dominated activities such as tractor driving. Despite encouraging changes in gendered labour divisions and women's involvement in milk production activities, there is still a long way to go to further women's participation in the formal economy and the available income generating activities in the region.

Overall, the company has been fully integrated in the social, cultural and economic life of Moga. It has quickly responded to immediate and long-term needs that strengthen the links between Nestlé and the community within which it

operates. For instance, during the 1988 floods that afflicted the region, Nestlé was at the forefront of relief operations, distributing food, fodder, and veterinary services to the stricken people. Longer-term and sustainable community development programmes have been undertaken to promote prosperity in the community. Health and sanitation awareness campaigns have reached to over 56,000 women in an effort to promote behavioural changes leading to better hygienic and nutritional practices and a reduction in the prevalence of diseases. The set-up of water fountains and tanks in government schools has benefited some 41,000 students and their positive impact has been such that

farmers expect that this service should be extended to the villages themselves.

Other social oriented programmes have included the support and participation in immunization programmes and arranging medical camps. All these have cemented the interrelationships between to Moga factory and the community around it.

The Nestlé Healthy Kids Programme is one such programme which is conducted in and around Moga in collaboration with the Punjab Agricultural University. The programme is conducted in government schools with the objective of creating and raising awareness regarding good nutritional practices, cooking methods to enhance nutritional content of foods and physical fitness among students in village

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schools and has reached out to about 4,000 girl students in the age group of 13 to 17 years. The Nestle Healthy Kids Programme is also conducted in other regions.

Finally, it should be noted to what extent the Moga district is benefited by the economic support of Nestlé through national, state and local taxes. For example, when the Octoroi taxes were imposed by the local authorities between 1997 and 2006, Nestlé's tax payments contributed to 20% to 35% of the total income of the municipality. Even now, we estimate that Nestlé is supporting around 25% to 35% of the expenses of the area through its taxes. Thus, Nestlé's tax payments have been instrumental in the

economic and social development of the area. This does not include the tax contributions of its suppliers on direct Nestlé-related economic which is likely to be quite significant.

In retrospect, it is noteworthy that Nestlé developed a milk economy in India in 1961, when the country was in the early stages of exploring such models. The milk that was available for sale was mostly adulterated with water of dubious quality by the milk-sellers. Nestlé developed a culture for milk production and assisted in its development by being consistent and transparent in milk procurement ensuring that both the milk procured and the products manufactured are consistently of high quality, payments made to the

farmers are regular and providing free veterinary and agronomic services to them and assuring that they have access to good quality medicine at cost. During the early days of the Moga factory, it provided credits for various specific purposes but with proliferation of banking services, Nestlé currently assists the farmers to get loans from the banks.

Additionally, Nestlé has provided multiple social services to the suppliers when it was neither expected nor was its responsibility as a private company to do so. It has consistently tried to train women on animal husbandry, food and nutrition, and hygienic information. It has provided clean water to schools and constructed latrines for girls in schools.

In fact, when we asked the farmers what they would like Nestlé to help them with, a consistent answer was higher price for milk and provision of clean water to the villages since they were aware that the company was doing so for schools. When we told them that provision of water is a task of the government institutions, a common response was that the government had not provided this service in the past and in their view unlikely to do so in the foreseeable future.

Annex 1 shows how different development indicators have changed significantly over the last 50 years in Moga, as well as Nestlé's roles in catalyzing these changes. While many other factors like the Green Revolution

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and evolution of appropriate policies at different levels of government have helped, it should be noted that without the presence of Nestlé at Moga, many of these improvements would not have taken place within this time period and the magnitude and distribution of the beneficiaries would most certainly have been significantly less. These changes are shown in Figure 1 as timeline diagrams of developments from 1961 to 2011.

In retrospect, two issues stand out from our current study:

1. The pioneers of the Moga factory were at least 40 years ahead of their time. They understood and implemented the current concepts of

corporate social responsibility and 'creating shared value'. They fully appreciated the philosophy behind these two concepts. However, they were primarily "doers": they did not have time to enunciate the philosophy behind what they did, or write about it. They realized the fortunes and the futures of both Nestlé and the society as a whole in Moga would be intricately interlinked for decades. Both would prosper or fall together.

2. Their actions, which ensured that the farmers of Moga continually improved their standards of living and quality of life, which, in turn, assured steadily increasing milk production. Nestlé procured this milk, which enabled its

factory to go from strength to strength. They viewed the success of the Moga farmers as Nestlé's success and vice versa.

It is commonly said that Napoleon should not be judged by the morality and ethics of the 21st century. However, if the pioneers of the Moga factory are judged by the current 21st century standards, it is evident that they were 50 years ahead of their time in terms of their attitudes, perceptions, thinking and performance. They established a new ethos which fostered active but historically neglected partnerships, completely rethinking the existing business models, reordering and streamlining the then accepted wisdom of supply chain relationships, not only for

when the factory was started but also for the future. They put in place innovating, sustainable and forward-looking business models, which by any standard were well ahead of their time. They also imposed on them higher social, economic and environmental standards which have been further regularly improved over the decades. In the process, they set in motion a process which have rescued well over a million people from crushing poverty through their own activities and also indirectly through their suppliers.

Nestlé started to organize the farmers of Moga as early as 1961. It created a milk market and successfully formulated a business model that worked under the Indian conditions. While the

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achievements of Operation Flood are widely known in India and abroad, the pioneering efforts of Nestlé which have very significantly contributed to the rural development in Moga and have enabled consumers in urban areas to obtain high quality milk products, are basically unknown in the country at present. It is now up to Nestlé to showcase its pioneering business model in Moga, which as business venture has been a remarkable success, and has made significant contributions to rural development and poverty alleviation efforts of the region which are generally left to the public sector to perform. It is

noteworthy that a private sector company undertook measures which are normally undertaken by various government departments. In the process, Nestlé built a highly successfully business which ensured that all its consumers have access to high-quality milk and other food products. It is thus a remarkable case of corporate success and an excellent example of corporate social responsibility. What is extraordinary is that all these efforts started and were achieved nearly half-a-century ago when the theories behind CSR were not even enunciated let alone implemented.

Timeline diagrams of developments from 1961 to 2011

License Raj Model

1960-1991

Government fixed the milkshed area; prices were regulated by cooperatives.

Notable Evolution of Milk Procurements

1962-1992

Milk purchases increase from 2,054 tonnes to 105,114

Milk procurement in 1962 totalled INR 910,000

Nestlé accelerated irrigation programme 1968

Construction of 357 tubewells & power driven pumps.

Wheat yields rose by 50% and rice production began.

White Revolution. Beginning of Operation Flood 1969

Modernisation of the dairy industry.

Increasing rapport with farmers 1970-1980

The number of agents more than doubled from 130 in 1970 to 300 a decade later.

Moga Factory established 1961
Dailying as a low-input, low-output supplementary activity to agriculture. 180 farmers supplied an average of 3 kg.

Green Revolution in Moga 1965

Milk as a new cash crop 1972

Milk procurement cost was

INR 25.68 m including transportation payments.

INR 31m were injected to the region.

Expanded supply network 1985

50,000 regular and 9,989

occasional suppliers.

Nestlé in Moga, 1961 to 2012:

Timelines for progressive development

Timeline diagrams of developments from 1961 to 2011. Contd...

Environment Sustainability 1997-2010

Reduction of 80.7% in water use, 80% in waste water generation, 62.5% in energy use, and 71% in CO₂ emissions per tonne of production for Nestlé India.

Contributions to the local economy 1992

Nestlé was paying Rs. 609 m a year in milk procurements. This was only Rs. 952, 000 in 1962 and slightly over Rs. 29 m in 1972

Liberalisation of the Indian Economy, 1991

Abolishment of government fixed prices and milksheds.

Key economic actor 1992

Abolishment of government fixed prices and milksheds.

Community Activities 1999-2012

Water facilities have been constructed in 115 schools benefitting over 43,807 students
Water Awareness Programmes have reached 20,563 students.

Intensified competition for milk procurements 2002

11 state cooperatives, 30 private dairy plants.

An important tax payer 2009-2010

INR 507.7 m in taxes were paid to the state government and INR 163 m to the central government.

Furthering socio-economic development 2010-2011

Nestlé payments to milk producers alone exceeded INR 6,120 m.

Extended network of ancillary services 2010

Nestlé's 147 main suppliers employed 86,371 persons

Moga consolidated and strong dairy tradition 2012

Punjab contribution to 10.5% of India's milk production with 3% of the dairy population.

Milk procurement reached 375,000 tonnes in 2012

Supplies from 110,000 farmers coming from Punjab, Haryana and Rajasthan.

Nestlé in Moga, 1961 to 2012:
Timelines for progressive development

Table 1. An evolving landscape: Nestlé in Moga, 1961-2011

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
National development plans or strategies	<p>License Raj Model: government planned economy and regulated production. Self-sufficiency oriented, import substitution industrialization model.</p> <p>1966 - The Green Revolution and progress towards self-sufficiency in food grains; introduction of high-yielding varieties of seeds; increased use of agrochemicals and irrigation.</p> <p>1970 - Operation Flood, the world longest running development project, was put in place to create a nationwide milk grid.</p>	Self-sustaining White Revolution - Operation Flood to modernize the dairy industry. Introduction of state-sponsored farmers' cooperatives.	<p>Trade liberalization and economy de-regularization.</p> <p>Development of a competitive agricultural sector; de-licensing and de-canalization of dairy products.</p>	Following strong economic reforms and liberalization (opening to international trade and investment, deregulation, tax reforms and inflation-controlling measures) the country continues to witness increases in the incomes of people. In spite of economic and political turmoil, the current rate of growth is significantly above average by international standards.
Risks and uncertainties	In 1966 and 1967, currency devaluations; droughts; and land and labour problems led to an increase on production costs and a surge in imported raw materials. Labour setbacks were reversed due to continued efforts to provide extension services to farmers to increase yields and quality.	In Moga and neighbouring districts, from 1986 to 1993, 200 deaths and over 25 people injured were attributed to terrorist activities. Throughout this period, the good rapport Nestlé had established with the local civil administration and the key economic role it played, and still does, for many local families, meant that the number of milk suppliers continued to grow in all but one year. In 1988, milk supplies decreased as terrorism escalated, restricting the inflow of labourers from Bihar and Uttar Pradesh and triggering the outflow of local residents and migrant workers. That same year, floods affected 200,000 people in over 1,483 stranded villages.		

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
<p>Local economic landscape and living standards</p>	<p>In 1960, Punjab was a place of abject poverty; widespread malnutrition; high population growth; mud houses; poor transportation; very few houses had access to electricity; low productivity; and subsistence agriculture as main economic activity. Water supply, irrigation systems and transportation were mostly animal-operated.</p> <p>With the Moga factory opening in 1961, soon a milk economy developed, the dairy sector was organized, and ancillary economic services started to mushroom.</p> <p>In 1962 Nestlé contributed Rs 952,000 in milk payments, increasing to Rs. 29 million in 1972. By 1974, Nestlé was purchasing SFR 22 million worth of local raw materials.¹</p>	<p>By 1980, 210,000 local persons were associated with Nestlé, benefitting in one way or another from the company's various development programmes. In 1983, milk deliveries came from 35,000 regular and 9,989 occasional suppliers. By 1987, this number increased to 84,585 farmers.</p>	<p>In 1992, Nestlé contributed Rs 740 million to the local economy in milk payments to its farmers. Most of this disposable income was spent locally. Moreover, Rs 80 million were paid in local taxes, commissions to dairy milk agents, and in transportation costs. In 1992, around 77 workshops were delivering electric and mechanical support to the Moga factory.</p>	<p>In 2011, the commercial transactions between Nestlé and 147 related enterprises were responsible for the formal employment of over 86,200 people.</p>

¹ Nestlé in the Developing Countries, 1978, Nestlé Alimentana S.A., Vevey, p. 138.

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
Local economic landscape and living standards	Most regular suppliers continue to be small and very small landholders and as such, the increased disposable income they receive from milk sales represented a significant complement to their main farming activities. Milk payments bridge the income gap from selling wheat in April and rice in October and as farmers usually obtain their income from selling their crops twice a year, they have started to rely on regular and predictable fortnightly milk payments from Nestlé for daily expenses.	Marginal milk suppliers constituted a significant group. Since they are economically disadvantaged, milk receipts are of great benefit to them as there are no caps on the amount of milk supplied. They rely on Nestlé as a guaranteed buyer for their produce. More generally, albeit depending on the season (and thus fluctuating farm earnings), milk-related income is used for feed and fodders; in improved farm equipment and agricultural inputs, for household foodstuff consumption and clothing; short-term savings and repayment of debts and loans; school fees; socio-cultural activities (weddings, festivals); demerit goods (alcohol and tobacco); and improved family and animal health.	Following national economic reforms and liberalization, the Milk and Milk Products Order (MMPO) came out in 1992. It came to regulate the local production of milk and dairy and included sanitary and hygienic regulations to ensure product quality. Throughout the decade, Nestlé's milk share remained at around 22.5% even when new stakeholders entered the local market. By 1991, the state cooperatives Milkfed started setting up plants in Moga, buying 5.9% of the district's total milk produced by 1992. Other private companies settled in the area, taking 3.1% of allyields.	Punjab now has about 3% of Indian dairy population but contributes to 10.5% of the national dairy production. ² By 2002-03, 11 state cooperatives, 30 private dairy plants and a few public-private ones were operating in Moga. Nestlé aside, these new stakeholders were buying 5480 tonnes of milk. ³
Local dairying conditions	The sector was largely unregulated and subject to adulteration and arbitrary practices. Dairying was a low-input, low-output, low-income supplementary activity to agriculture. Government established floor prices for milk processing factories. Nestlé's engagement in Moga revolutionized socio-cultural attitudes to dairying including the removal of stigma attached to the commercial production and sale of milk and the establishment of a context-tailored milk collection system. In 1961, the company's supply chain initially drew inputs from 180 farmers in four villages.	The company cooperatives' rates as floor prices and paid a premium 9 to 12% higher. Additional bonuses between 7 and 10% were introduced to encourage farmers to feed their animals better during low season, thereby reducing supply fluctuations. Even then, Nestlé was buying less than 25% of Moga's rising total milk production; which from 1982 to 1992, rose from 265,000 to 467,000 tons. ⁴		

² Nestlé in India, 1962-1992, pp 33-34.

³ Interview with Dr. Surinder Singh, Director Research, Guru Angad Dev Veterinary and Animal Science University (GADVASU), Ludhiana on 14/11/2011.

⁴ Dairy Scenario of Punjab, Gill, M.S., Bhatti, J.S., available at http://pdta.org.in/website/english_articles/DAIRY%20IN%20INDUSTRIES%20IN%20PUNJAB.pdf (Accessed on 29/5/2012).

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
Local dairying conditions	By 1970, this network had reached out to 700 villages, each one engaging an average of 250 families.			
	Nestlé consistently set higher quality standards than those domestically imposed for both its inputs and final products. It has also provided information on how to meet, maintain and improve such higher standards. These quality upgrades have been used as quality benchmarks and common denominators for other stakeholders involved in dairy production.			
Local dairying conditions	<p>Amelioration of poor, weather-dependent infrastructure, absent or severely limited electricity supply, poor irrigation systems and animal-operated water lifting devices.</p> <p>In 1968, Nestlé began an accelerated irrigation programme consisting of drilling 357 well tubes and installing power driven pumps, which contributed to increases in wheat yields by 50 %. Rice could be grown from July to October.</p> <p>This and similar actions prepared the area to quickly reap the benefits of the Green Revolution and mechanized and modernized agriculture.</p>	<p>National and state macroeconomic growth led to an overall improvement in the communities' physical capital and available infrastructure, a process furthered consolidated the benefits the Moga factory as a permanent source of local wealth creation:</p> <ul style="list-style-type: none"> • All villages have been connected to the electricity grid • Increasing use of landline and mobile phones • Growing number of paved roads • Easier accessibility by land • Modernization of the transportation system • Steady increase in the number of motorized vehicles • Mechanization of irrigation systems and fodder-chopping activities • Establishment of milk parlours 		

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
Human and Community development context	In 1911, only a handful of villages had primary schools and most of the population was illiterate. Soon after the Moga factory began operating an elementary school was established in Dudhike, and was later upgraded to high school in 1966-67. By 1968, the 1st graduate college opened in Moga and many female students enrolled. There was a surge of English secondary schools.	<p>The company carried out periodical studies assessing the progress of the dairy industry in the region and the socioeconomic challenges faced by the communities and that may impact milk production. Such evaluations have indicated the multiplier effects the company has had in the transformation of the region and on the overall improvement of the communities' living conditions:</p> <ul style="list-style-type: none"> Improved living conditions with brick houses and cement flooring Construction of dry-pit latrines and indoors sanitation facilities Enhanced nutrition derived from higher quality in the supply of raw materials, that are also used for household consumption, as well as from the growing availability of quality finished products Higher literacy rates, growing demand for more schooling facilities and better education. Still, in 2011 overall literacy rates for Moga (71.6%) were lower than those at the provincial level (75%). However, the local literacy rate for women was 67.4% compared to the Punjab average of 63.4%¹ Household adoption of more hygienic food and nutrition practices and habits Establishment of an entrepreneurial class In close collaboration with India's National Dairy Research Institute and Punjab Agricultural University, awareness campaigns have led to the implementation of good practices in animal husbandry, pesticide residue reduction, fuel efficiency and use of biogas plants Intensified use of bio-gas plants and smokeless stoves, replacing wood or coal ones. By 1987, Nestlé had already constructed 2285 smokeless stoves in the region 	<p>By 1992, one in 10 villages had secondary schools and one in five major villages had high schools.</p>	<p>During the last 10 years, more than 15 colleges of engineering, pharmacy, etc. have been opened in and around Moga.</p>

¹ Parvesh, Sharma. "Punjab females less educated than males: SSA." Times of India, November 11th, 2011. Web. June 7th, 2012. http://articles.timesofindia.indiatimes.com/2011-11-07/india/30369061_1_literacy-rate-males-punjab-education-department

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
Socio-cultural and gender-related attitudes	<p>Taboos regarding milk commercialization discouraged sustaining or rising production levels. Overtime, this belief was abandoned and milk production began to be accepted as an income-generating activity.</p> <p>Nestlé's veterinary specialists, agronomists and agro-technicians greatly helped in changing fatalistic attitudes towards illness and diseases that afflicted cattle.</p> <p>Growing recognition of the roles women play in the dairy industry. They were responsible for over 87% of milking and animal watering, cleaning and feeding.[*]</p>	<p>By working with the local community to gradually build trust and confidence in the milk trade, Nestlé's factory in Moga kick-started what is now a 'strong dairy tradition.'</p> <p>Farming and dairying activities seem to be sharply divided along gender lines. Women take care of cutting and chaffing fodder; animal feeding, watering, cleaning and care; and milking. A reduced number is involved in delivering milk to collection centres. As they carry out the bulk of dairying work, women's training needs has been addressed through the 'Village Women Dairy Development Programme.' These schemes have benefited over 51,000 women and aim at improving milk quality and yields, animal hygiene. As literacy rates remain comparatively low among women, albeit higher than the provincial average, capacity building relies heavily on audio-visual media for all educational purposes: diagrams, charts, illustrations, posters, slides, photos, pictorial-guides, pre-recorded cassettes with lyrics, and short films. The transmitted skills seek to encourage them to get further involved in milk production and other remunerated activities.</p> <p>Women have been targeted by nutrition campaigns for households to adopt more balanced diets, and better hygiene and sanitation practices. Some community members have reshaped gender expectations by taking on professional roles in male-dominated activities such as tractor driving.</p> <p>However, despite encouraging changes in gender labour divisions and women's rising involvement in milk production-related activities, there is still a long way to go to further their participation in the formal economy and income generating activities available around Moga.</p>		
Nestlé's rapport with farmers	<p>The company used cooperatives' rates as floor prices and paid a premium 9 to 12% higher. Additional bonuses between 7 and 10% were introduced to encourage farmers to feed their animals better during low season. This reduced supply fluctuations.</p> <p>The company, supplying farmers, factory workers and ancillary services established long-term social capital and loyalty-based, relational transactions.</p>	<p>Market changes and increased competition have resulted in farmers' rising milk supply elasticity. Profitability has come to be based on the price of milk alone. This is particularly true among young farmers, who do not seem to factor in technical assistance when making supply decisions. Conversely, elder farmers point at the 50-year business relationship with Nestlé and seem to have more deeply internalized the transactional and relational benefits resulting from this relationship.</p>		

^{*} Education and information on Animal Husbandry Techniques for Rural Women: Why and How, TS Sandhu, FSL, Moga (no date), pp. 4-5.

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
<p>Nestlé's rapport with farmers</p>	<p>Initially driven by the need to increase milk intakes, Nestlé actively sought to help the farmers in increasing quantity and quality of milk. Overtime, the company and farmers supplying it have established a 'community of interest' in which the company encourages, supports and facilitates those factors necessary for its operation which in turn are also factors spiralling Moga's development process:</p> <ul style="list-style-type: none"> • Highlighting relational over transactional interactions. Nestlé Agricultural Extension Services keeps direct and close contact and rapport with over 85,000 individual farmers as experts and trainers spend most of their time in the fields. • Relying on the establishment and strengthening of mutual and effective communication avenues between the company and supplying farmers, farmers and veterinarians, farmers and agronomists and farmers and extension department • Offering systematic and/or specialized factory training, apprenticeships and postings in other factories abroad • Encouraging local banks to extend credit lines for dairying related activities and inputs • Putting in place affiliation incentives for milk suppliers as payments for required inputs and loan repayments are deducted from milk payments • Equipping farmers with transferable skills that can help them perform different and better tasks, enlarging their occupational flexibility and mobility and their engagement in additional income-generating activities • Publicly recognizing successful farmers, disseminating their achievements and encouraging other entrepreneurs to follow • Drawing in local talent, recruiting workers from the community and offering extensive training • Using local knowledge and partnering with local institutions, universities and banks to foster and disseminate innovations <p>Factory employees, agents and dairy producers working with and for Nestlé have benefited from the reputational capital and social prestige associated with the brand. As ancillary firms adopt quality standards and industrial processes meeting Nestlé's requirements, they can also trade with other companies who see their association with Nestlé as a quality and reliability guarantee. Working and collaborating with the company has had an aspirational impact in the community.</p> <p>Continuous and expanding network of free, relevant and cutting-edge veterinary, husbandry, dairying and agricultural advice; technical assistance, education and capacity building sessions; and supporting services that:</p> <ul style="list-style-type: none"> • Are delivered by context, region and local conditions-sensitive specialists. • Support research, innovation, development and dissemination of successful practices regarding key inputs and raw materials • Encourage the adoption of novel and innovative farming methods • Promote peer-to-peer learning among suppliers • Foster better animal health and preventive treatments 			

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
<p>Nestlé's rapport with farmers</p>	<ul style="list-style-type: none"> • Help close farmers' skill gaps affecting the supply of raw materials to Nestlé • Extensively involve Nestlé staff at suppliers' locations to ensure successful implementation of new technologies and quality control processes. <p>The company offers its factory employees a competitive package that goes well beyond government requirements of 48 working hours per week, 14 days of holidays and medical insurance and treatment for each employee. Nestlé's workers receive four times as high salaries compared to the government-fixed minimum salary for 45 working hour weekly shifts; seniority-based progressive holidays; medical insurance and treatment for employee and their families; canteens services at nominal prices; Absenteeism is low (4.5%) and so is the turnover rate, 1.6%.</p> <ul style="list-style-type: none"> • Farmers have favoured supplies to Nestlé due to: the prices paid for milk and other raw products; steady and timely payments that act as insurance against price fluctuations and smoothen income receipts; convenient payment methods; accurate, strict and fair quality assurance controls and measurements; supporting services and training; offer of financial services; trustworthiness and responsiveness of accountability mechanisms; corporate reliability, trustworthiness and reputation; and expectations of positive technological, managerial, technical and skill spillovers. <p>Some ancillary enterprises have developed a symbiotic relationship with Nestlé, tying most of its success and business expansion to that of its business partner. Paras Spices Pvt Ltd. has built a systematic collaboration with Nestlé, establishing a wide and solid range of interactions and mutually beneficial investment and training requirements. The scope of their transactions has grown from a 2kg turmeric purchase in 1982 to one involving over 5,000 farmers directly involved in the production of spices from all over the country and 35,000 to 40,000 more indirectly involved in the process. This same relation has brought Para's employees a competitive income, training, medical plan, safety and security package. The spices company expansion ventures are supported with Nestlé's know-how, experience in factory design and laboratory requirements, and technical assistance that can be easily reached due to geographically proximity between the two partners.</p> <p>Transportation and animal-feed companies have also spurred and expanded their business operations by harnessing the market opportunities being associated to Nestlé since the factory was first established and since then, the company has used its with in-house capital to upgrade, improve and adapt its equipment and technology to respond to Nestlé's requirements, expectations and standards. This raised Brar Enterprises' business practices quality, setting a much higher floor hereby made available to local and multinational companies alike making exceptionally good quality the transporters' status quo practice. Nestlé has gone from being Brar's sole partner to the current 20% of business activities.</p>			

Local Context	Early years, 1960-1970	1980s	1990s	2011 and beyond
Nestlé's rapport with farmers	<p>Before the arrival of Nestlé in Moga, cattle-feed as an organized business activity was unknown and so fodder was sold to farmers on a non-profit basis. However, as quantity and quality demands for animal feed rose, local entrepreneurs stepped in. P. Marika Registered had been producing mustard oil since 1933 and as it also sold mustard cakes, it decided to enter the cattle-feed business in 1988. Initially, their plant original capacity of 50TPD has now been doubled. The company now employs over 25 trained people working entirely on preparing animal feed according to a Nestlé-provided formula and meeting the required quality standards.</p> <p>The company has been fully integrated in the social, cultural and economic life of Moga, quickly responding to immediate and long-term needs that strengthen the links between Nestlé and the community in which it operates. For instance, during the 1988 floods that afflicted the region, Nestlé was at the forefront of relief operations, distributing food, fodder, and veterinary services to the stricken people. Since 1999, longer-term and sustainable community development programmes have been undertaken to promote prosperity in the community. Around 115 of these initiatives have provided drinking water and other basic facilities at local schools, benefitting over 40,800 students. Other programmes have supported immunization campaigns and set medical camps. While the company finances such projects, it encourages community ownership and local responsibility for maintaining them.</p>			



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